# CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD SAN FRANCISCO BAY REGION

ORDER NO. 77-65

NPDES NO. CA0037443

WASTE DISCHARGE REQUIREMENTS FOR SAN RAFAEL SANITATION DISTRICT MARIN BAY PLANT, MARIN COUNTY

The California Regional Water Quality Control Board, San Francisco Bay Region (hereinafter Board), finds that:

- 1. San Rafael Sanitation District, Marin Bay Plant (hereinafter discharger), by application dated February 14, 1977, has applied for waste discharge requirements and a permit to discharge wastes under the National Pollutant Discharge Elimination System.
- 2. The discharger presently discharges domestic wastes from its sewage treatment plant into San Pablo Bay, a water of the United States, at 38°, Ol', 27" latitude and 122°, 27', 14" longitude.
- 3. The report of waste discharge describes the existing discharge as follows:

Average Flow: 0.104 million gallons per day (mgd)
Design Flow: 0.160 million gallons per day (mgd)

- 4. A Water Quality Control Plan for the San Francisco Bay Basin was adopted by the Board in April, 1975. The Basin Plan contains water quality objectives for San Pablo Bay.
- 5. The beneficial uses of the San Pablo Bay are:
  - a. Recreation
  - b. Fish Migration and Habitat
  - c. Habitat and resting for waterfowl and migratory birds
  - d. Industrial supply
  - e. Esthetic enjoyment
  - f. Navigation
  - g. Shellfish propagation and harvesting for non-human consumption
- 6. The discharger is presently governed by waste discharge requirements Order No. 74-122 and Order No. 76-47 which allows discharge to San Pablo Bay.
- 7. The discharger and interested agencies and persons have been notified of the Board's intent to revise requirements for the existing discharge and have been provided with the opportunity for a public hearing and the opportunity to submit their written views and recommendations.

- 8. The Board, in a public meeting, heard and considered all comments pertaining to the discharge.
- 9. This project involves the continued operation of a publicly-owned facility to provide sewerage service with negligible or no expansion of use beyond that previously existing. Consequently, this project will not have a significant effect on the environment based upon the exemption provided in Section 15101, Title 14, California Administrative Code.

IT IS HEREBY ORDERED, pursuant to the provisions of Division 7 of the California Water Code and regulations adopted thereunder, and to the provision of the Federal Water Pollution Control Act, as amended, and regulations and guidelines adopted thereunder, that the discharger shall comply with the following:

#### A. Prohibitions

- 1. Discharge at any point at which the wastewater does not receive an initial dilution of a least 10:1 is prohibited (receiving water to wastewater flow).
- 2. There shall be no bypass or overflow of untreated wastewater to waters of the State, either at the treatment plant or from the collection system.
- 3. The average dry weather flow shall not exceed 0.160 mgd. Average shall be determined over three consecutive months per year.

Exceptions to Prohibiton A.l. will be considered for certain wet weather discharges and other discharges having a high initial dilution where an inordinate burden would be placed on the discharger relative to beneficial uses protected and when an equivalent level of environmental protection can be achieved by alternate means. Exceptions will also be considered where a discharge is approved as part of a reclamation project or where it can be demonstrated that environmental benefits will be derived as a result of the discharge.

#### B. Effluent Limitations

1. Prior to achieving compliance with the limitations specified in B.2. below, the following interim limitations shall apply:

a. BOD 40 mg/l (84 lbs/day) maximum
b. Suspended Solids 60 mg/l (126 lbs/day) maximum
c. Settleable Matter 0.1 ml/l-hr

2. Effluent discharged shall not exceed the following limits:

|     | Constituent         | Units                             | 30-Day Average | 7-Day Average | <u>Maximum Daily</u> |
|-----|---------------------|-----------------------------------|----------------|---------------|----------------------|
| a.  | BOD                 | mg/l<br>lbs/day<br>kg/day         | 30<br>63<br>28 | 45<br>-<br>-  | 60<br>126<br>56      |
| b.  | Suspended<br>Solids | mg/l<br>lbs/day<br>kg/day         | 30<br>63<br>28 | 45<br>-<br>-  | 60<br>126<br>56      |
| C ø | Grease & Oil        | mg/l<br>lbs/day<br><b>kg</b> /day | 10<br>21<br>10 | <br>          | 20<br>43<br>19       |

- 3. Chlorine residual shall not exceed an instantaneous maximum of 0.0 mg/l.
- 4. The arithmetic mean of the biochemical oxygen demand (50 day, 20°C) and suspended solids values, by weight, for effluent samples collected in a period of thirty (30) consecutive calendar days shall not exceed fifteen (15) percent of the arithmetic mean of the respective values, by weight, for influent samples collected at approximately the same times during the same period (85 percent removal).
- 5. The pH of the discharge shall not exceed 8.5 or be less than 6.5.
- 6. In any representative set of samples the waste as discharged shall meet the following limit of quality:

#### TOXICITY:

The survival of test organisms acceptable to this Board in 96-hour bioassays of the effluent shall achieve a median of 90% survival for three consecutive samples and a 90 percentile value of not less than 70% survival for 10 consecutive samples.

7. Total coliform bacteria for a moving median of seven (7) consecutive daily samples shall not exceed 23 MPN/100 ml.

### C. Receiving Water Limitations

- 1. The discharge of waste shall not cause the following conditions to exist in waters of the State at any place:
  - a. Floating, suspended, or deposited macroscopic particulate matter or foam;
  - b. Bottom deposits or aquatic growths;
  - c. Alteration of temperature, turbidity, or apparent color beyond present natural background levels;

- d. Visible, floating, suspended, or deposited oil or other products of petroleum origin;
- e. Toxic or other deleterious substances to be present in concentrations or quantities which will cause deleterious effects on aquatic biota, wildlife, or waterfowl, or which render any of these unfit for human consumption either at levels created in the receiving waters or as a result of biological concentrations.
- 2. The discharge of waste shall not cause the following limits to be exceeded in waters of the State in any place within one foot of the water surface:
  - a. Dissolved oxygen

    5.0 mg/l minimum. Annual median 80% saturation. When natural factors cause lesser concentrations than those specified above, then this discharge shall not cause further reduction in the concentration of dissolved oxygen.
  - b. Dissolved Sulfide O.1 mg/l maximum.
  - c. pH Variation from natural ambient pH by more than 0.2 pH units.
  - d. Un-ionized Ammonia O.025 mg/l annual median O.4 mg/l maximum

## D. Provisions

- 1. The requirements prescribed by this Order supersede the requirements prescribed by Order No. 74-122 and Order No. 76-47 adopted by the Board on November 1, 1974 and May 4, 1976. Order Nos. 74-122 and 76-47 are hereby rescinded.
- 2. The discharger shall comply with the following time schedule to assure compliance with specifications of this Order:
  - a. Compliance with Effluent Limitations B.2.a., B.2.b., B.2.c., B.4., and B.6.; Receiving Water Limitations C.1.a., C.1.c., C.2.d. and Prohibition A.1.
  - b. Task Completion Date Report of Compliance
    Full Compliance July 1, 1977
  - c. The discharger shall comply with all other effluent and receiving water limitations, prohibitions, and provisions of this Order immediately upon adoption.

- 3. The discharger shall review and update annually its contingency plan as required by Board Resolution No. 74-10. The discharge of pollutants in violation of this Order where the discharger has failed to develop and/or implement a contingency plan will be basis for considering such discharge a willfull and negligent violation of this Order pursuant to Section 13387 of the California Water Code
- 4. The discharger shall comply with the self-monitoring program as ordered by the Executive Officer.
- 5. The discharger shall comply with all items of the attached "Standard Provisions, Reporting Requirements and Definitions" dated April 1977, except B.3.
- 6. This Order expires June 15, 1982. The discharger must file a report of waste discharge in accordance with Title 23, Chapter 3, Subchapter 9 of the California Administrative Code not later than 180 days in advance of such expiration date as application for issuance of new waste discharge requirements.
- 7. The Regional Board may modify or revise the effluent and receiving water limitations for protection of the shallfish bed, upon completion of the Subregional Plan and final outfall location.

This order shall serve as a National Pollutant Discharge Elimination System permit pursuant to Section 402 of the Federal Water Pollution Control Act or amendments thereto, and shall become effective ten (10) days after date of its adoption provided the Regional Administrator, Environmental Protection Agency, has no objection. If the Regional Administrator objects to its issuance, the permit shall not become effective until such objection is withdrawn.

I, Fred H. Dierker, Executive Officer, do hereby certify the foregoing is full, true, and correct copy of an Order adopted by the California Regional Control Board, San Francisco Bay Region, on June 21, 1977.

FRED H. DIERKER Executive Officer

Attachments:

Standard Provisions, Reporting Requirements & Definitions